

IN THE CLAIMS

Sub D 1. (Cancelled)

2. (Cancelled)

3. (Previously amended) A system as claimed in claim 15 wherein
said navigation system includes identifiers, selected from the group consisting of
detectable marks and position sensors, which are respectively attachable to said
image signal acquisition unit and to said second subject and which are identifiable as
to position by said position acquisition unit.

Please amend claim 4 as follows:

4. (Currently amended) A system as claimed in claim 15 wherein
said image signal acquisition unit comprises an ultrasound probe laparoscope.

5. (Previously amended) A system as claimed in claim 15 wherein
said image signal acquisition unit comprises an X-ray source and an X-ray receiver.

6. (Previously amended) A system as claimed in claim 15 wherein
said imaging unit produces a 3D image of said first subject from said image signals.

Please amend claim 7 as follows:

7. (Currently amended) A system as claimed in claim 16 wherein
said imaging unit produces a 2D image of said first subject from said image
signals.

8. (Original) A system as claimed in claim 7 wherein said 2D image
represents an image plane in said first subject, and wherein said mixing unit mixes
an indication of a distance of said second subject from said image plane into said 2D
image.

Please amend claim 9 as follows:

9. (Currently amended) A system as claimed in claim 15 wherein said position acquisition unit simultaneously identifies the position of said image signal acquisition unit ~~an~~ and the position of said second subject.

10. (Previously amended) A system as claimed in claim 15 further comprising an acceptance device for said first subject and wherein said position acquisition device identifies a position of said acceptance device simultaneously with identifying the position of said image signal acquisition unit and the position of said second subject.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

Please amend claim 15 as follows:

15. (Currently amended) A system comprising:

an image signal acquisition unit for acquiring 2D image signals of an examination subject in real time, and an imaging unit for producing a 2D image of said the examination subject in an image plane from said 2D image signals;

an instrument having a tip adapted for interaction with said the examination subject;

a navigation system including a position acquisition unit for determining a position of said image signal acquisition unit and for determining a position of said tip relative to said position acquisition unit; and

a mixing unit connected to said imaging unit for mixing a representation of said tip into said 2D image and, if said tip is not located in said image plane, for ~~mixing a designation of~~ determining a distance of said tip from said image plane and for mixing a designation of said distance into said 2D image said designation being alterable and indicating a magnitude of said distance.

Please amend claim 16 as follows:

16. (Currently amended) A system comprising:
~~an a C-arm X-ray image signal acquisition unit for acquiring image signals of a first subject, and an image unit for producing an a 3d image of said the first subject from said image signals;~~
a support mechanism for supporting said the first subject;
a position acquisition system for determining a position of said C-arm X-ray image signal acquisition unit, said support mechanism, and a second subject relative to said image signal acquisition unit; and
a mixing unit for mixing a representation of said the second subject into said 3D image of said first subject dependent on said position of said C-arm X-ray image signal acquisition unit, said support mechanism, and said second subject relative to said C-arm X-ray image signal acquisition unit.

17. (Previously added) A system as claimed in claim 16 wherein said navigation system includes identifiers, selected from the group consisting of detectable marks and position sensors, which are respectively attachable to said

image signal acquisition unit and to said second subject and which are identifiable as to position by said position acquisition unit.

18. (Previously added) A system as claimed in claim 16 wherein said image signal acquisition unit comprises an ultrasound probe.

19. (Previously added) A system as claimed in claim 16 wherein said image signal acquisition unit comprises an X-ray source and an X-ray receiver.

20. (Previously added) A system as claimed in claim 16 wherein said imaging unit produces a 3D image of said first subject from said image signals.

Please amend claim 21 as follows:

21. (Currently amended) A system as claimed in claim 16 wherein said position acquisition unit simultaneously identifies the position of said image signal acquisition unit ~~an~~ and the position of said second subject.

22. (Previously added) A system as claimed in claim 16 wherein said position acquisition unit simultaneously determines said position of said image signal acquisition unit, said support mechanism and said second subject relative to said signal acquisition unit.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Previously added) A system as claimed in claim 15 wherein, if said tip is not located in said image plane, said mixing unit mixes a projection of said tip in said image plane into said 2D image.

Canceled
32. (Previously added) A system as claimed in claim 15 wherein said mixing unit mixes a circle, as said designation, into said 2D image, said circle having a diameter which is alterable dependent on said magnitude of said distance.

33. (Previously added) A system as claimed in claim 15 wherein said mixing unit mixes said designation into said 2D image with an alterable color intensity indicating said magnitude of said distance.